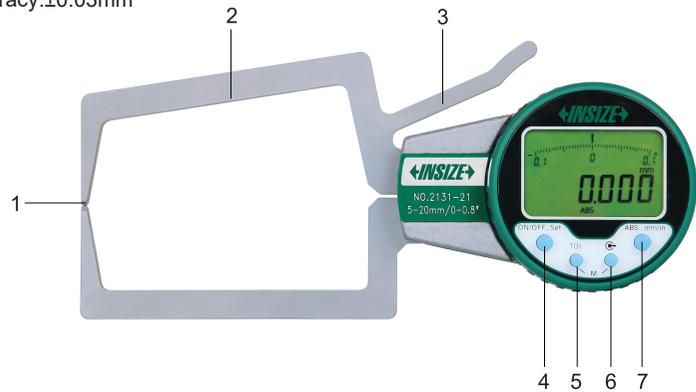




# OPERATION INSTRUCTION

## Digital Internal Caliper Gauges

Accuracy:±0.03mm



- 1-Measuring tips
- 2-Measuring arms
- 3-Operating lever
- 4-"ON/OFF...Set" button

- 5-"TOL" button
- 6-"↻" button
- 7-"ABS...mm/in" button

1. Internal caliper gages are used for quick measurement of internal sizes.
2. Buttons:

Short press: less than 2 seconds; long press: more than 2 seconds.

"ON/OFF...Set"

---short press: power on/off.

---long press: to set the initial reading after power on. "Set" appears and the first displayed digit blinks.

Short press "↻" button to change the digit. Short press "ABS...mm/in" button to change to next digit. Press "ON/OFF...Set" button to save after setting.

"TOL"

---long press to set tolerance. "▶" appears on the display and the first digit of displayed value blinks.

Short press "↻" button to change current digit, short press "ABS...mm/in" button to change to next digit. Press "TOL" button to save the upper tolerance after setting. "◀" will appear on the display at the same time and the first digit of displayed value blinks to set lower tolerance. The same operation of setting upper tolerance. Short press "TOL" button after setting, the gage will enter into tolerance measurement mode.

---Under tolerance measurement mode,when the measurement is beyond upper tolerance,

"H" will blink on the top right of the display. When the measurement is beyond lower tolerance, "L" will blink on the top left of the display.

Upper tolerance must be more than lower tolerance.



---short press: output the data to PC once, "↻" blinks once.

---long press: output the data to PC continuously, and "↻" keep displaying. Press the button again to stop outputting.

"ABS...mm/in"

---short press: for absolute and relative measuring mode conversion. The normal mode is absolute measuring mode, "ABS" is on display. Short press the button to enter relative measuring mode at any point (this point is called "relative zero point"), the reading is 0. Press the button again to go back to absolute measuring mode.

---long press: metric/inch conversion.

M (press "TOL" and "↻" simultaneously)

---short press, "Min" appears,enter into minimum value tracking mode.Short press "TOL" button again, "Max" appears,enter into maximum value tracking mode. Press "TOL" button for the third time, "H" appears, to track current value. Press "TOL" button again to exit.

3. It is necessary to do calibration before measuring. It's directly to set zero when the range is 0-20mm: press handle, release handle to make measuring heads to contact completely. Press button to set zero. Dial caliper's range is more than 20mm, caliper gage is calibrated with calibrated tool(or gauge block). Dial caliper measures calibrated tool(Fig.1), set the reading same as the normal value of calibrated tool.



Fig.1

4. How to use: press the operating lever to make distance between two measuring tips more than the workpiece to be measured. Release operating lever slowly to make two measuring tips well contacted with the workpiece and stuck it.For diameter measurements, slightly swing the gage to find the axial minimum (fig.2) and radial maximum (fig.3), get the result from the caliper gage. For thickness measurement, please find the minimum value and get the result.

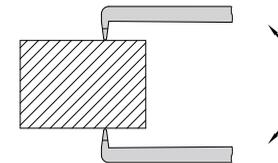


Fig.2



Fig.3

5. If there is nothing on the display or digits blurring, battery voltage is too low, please replace battery. If digits do not change when buttons are pressed, please take out battery and put it back after 1 minute. Remove battery if the caliper gage is not used for a long period of time,otherwise, liquid may leak from the battery and damage the gage.

6. During use, avoid excessive operation so as not to damage the measuring tips. After use please oil measuring tips to prevent rust.

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